AMENDMENTS

In the Claims:

1. (Currently Amended) A ~~control map for a~~ controller of an electrical machine having a rotor and at least one electrically energisable phase winding, the ~~control map comprising a~~ controller configured to apply a single predetermined angle correction factor to a portion of a predetermined advance angle profile covering a range of different rotor speeds, wherein the predetermined advance angle profile ~~representing~~ represents energisation of the phase winding with respect to angular position of the rotor over a range of rotor speeds~~, and a predetermined angle correction factor to be applied to a predetermined portion of the advance angle profile, wherein the angle correction factor depends on a difference between a measured input power to the machine and a predetermined input power at a predetermined rotor speed~~.

2. (Currently Amended) A ~~control map~~ controller as claimed in claim 1, ~~in which~~ wherein the predetermined advance angle profile includes on-advance angle data for ~~a predetermined~~ the range of different rotor speeds.

3. (Currently Amended) A ~~control map~~ controller as claimed in claim 2, ~~in which~~ wherein the controller is configured to apply the predetermined angle correction factor ~~is applied~~ to the on-advance angle data.

4. (Currently Amended) A ~~control map~~ controller as claimed in claim 1, ~~in which~~ wherein the predetermined advance angle profile includes off-advance angle data for ~~a predetermined~~ the range of different rotor speeds.

5. (Currently Amended) A ~~control map~~ controller as claimed in claim 4, ~~in which~~ wherein the controller is configured to apply the predetermined angle correction factor ~~is applied~~ to the off-advance angle data.

6-7. (Canceled).

8. (Currently Amended) A method of controlling an electrical machine having a rotor and at least one electrically energisable phase winding, comprising providing a control map comprising a predetermined advance angle profile and a predetermined angle correction factor ~~as~~

~~claimed in claim 1, 2 or 4,~~ to a controller as claimed in claim 1, 2 or 4 for the electrical machine, storing the control map in a memory in the controller and using the controller to control the electrical machine based on the stored control map.

9. (Currently Amended) A method of generating a control map for a controller of a machine having a rotor and at least one electrically energisable phase winding, the method comprising:

producing ~~a predetermined~~ an advance angle profile representing energisation of the phase winding with respect to the angular position of the rotor over a range of rotor speeds;

energising the winding in accordance with the advance angle profile;

measuring input power to the machine; and

producing a ~~predetermined~~ single angle correction factor ~~to be applied to~~ for a ~~predetermined~~ portion of the ~~control map~~ advance angle profile covering a range of different rotor speeds, wherein the angle correction factor depends on a difference between the measured input power and a predetermined input power.

10. (Currently Amended) A method as claimed in claim 9, ~~in which~~ wherein the winding is energised in accordance with the advance angle profile at a single predetermined speed, which speed is associated with the predetermined input power.

11. (Currently Amended) A method as claimed in claim 10, ~~in which~~ wherein the step of producing the angle correction factor includes applying predetermined incremental changes to the advance angle profile, measuring the input power after each incremental change and comparing the measured input power with the predetermined input power.

12. (Currently Amended) A method as claimed in claim 10 or 11, ~~in which~~ wherein the angle correction factor comprises [[the]] a change in angle required to reduce [[the]] a difference between the measured input power and the predetermined input power to within predetermined limits.

13. (Previously Presented) A method as claimed in claim 9, 10 or 11, further comprising storing the angle correction factor in a memory associated with the controller.

14. (Previously Presented) A method as claimed in claim 9, 10 or 11, further comprising transmitting the angle correction factor to the controller by means of radio frequency signals.

15. (Currently Amended) A method as claimed in claim 9, 10 or 11, ~~in which the~~ wherein an input voltage applied to the phase winding is substantially constant.

16. (Previously Presented) A computer readable medium having a computer program stored thereon for controlling a machine in accordance with the method as claimed in claim 9, 10 or 11.

17. (Canceled).

18. (Currently Amended) An electrical machine incorporating a ~~control map~~ controller as claimed claim 1, 2 or 4.

19. (Currently Amended) An electrical machine as claimed in claim 18~~, in the form of~~ comprising a switched reluctance motor.

20. (Previously Presented) A cleaning appliance incorporating an electrical machine as claimed in claim 18.

21-27. (Canceled).

28. (Currently Amended) A ~~control map~~ controller as claimed in claim 1, wherein the controller is configured to apply the predetermined angle correction factor ~~is applied~~ to an on-advance angle of the rotor and an off-advance angle of the rotor ~~such that a rotation angle between the on-advance angle and the off-advance angle is substantially unchanged~~.

29. (Currently Amended) A method as claimed in claim 9, further comprising applying the angle correction factor to an on-advance angle of the rotor and an off-advance angle of the rotor ~~such that a rotation angle between the on-advance angle and the off-advance angle is substantially unchanged~~.

30. (Currently Amended) A ~~control map~~ controller as claimed in claim 1, wherein the predetermined angle correction factor further depends on an input voltage.

31. (Previously Presented) A method as claimed in claim 9, wherein the angle correction factor further depends on an input voltage.